

SECTION 1: INTRODUCTION

1.1 STATE PROFILE

INTRODUCTION

Ohio was the 17th territory to become part of the United States of America on March 1, 1803. Ohio is an Iroquoian word meaning “great river”. Located in the north-central region of the United States, Ohio has been home to eight of the forty-five Presidents of the United States including Presidents W.H. Harrison, Grant, Hayes, Garfield, B. Harrison, McKinley, Taft, and Harding.

GEOGRAPHY

The state is divided into two broad geographic regions, loosely following a diagonal line running from the south-western corner to the north-eastern corner. The portion of the state above the line was repeatedly inundated by glaciers and is generally flat with glacial sediments conducive to agriculture and large population centers. One notable exception is a region in west central Ohio where an outcropping of large hills exists. The areas south and east of the line consist of the foothills to the Appalachian Mountains, which start in southeastern Ohio.

Ohio borders the states of Pennsylvania, Kentucky, West Virginia, Indiana, and Michigan while sharing an international border with the Canadian province of Ontario. A large portion of the state’s border is associated with bodies of water including West Virginia and Kentucky along the Ohio River and Ontario near the center of Lake Erie. The majority of Ohio’s northern border is encompassed by Lake Erie, which was created by and subsequently filled with water from glaciers. River systems in the northern third of Ohio flow north into Lake Erie. The remainder of the waterways in the state flow south into the Ohio River. Ohio covers 40,952 square miles of land. Land use percentages range from a high of 39.08 percent for cultivated crops to a low of .23 percent for barren (See Chart 1.1.a).

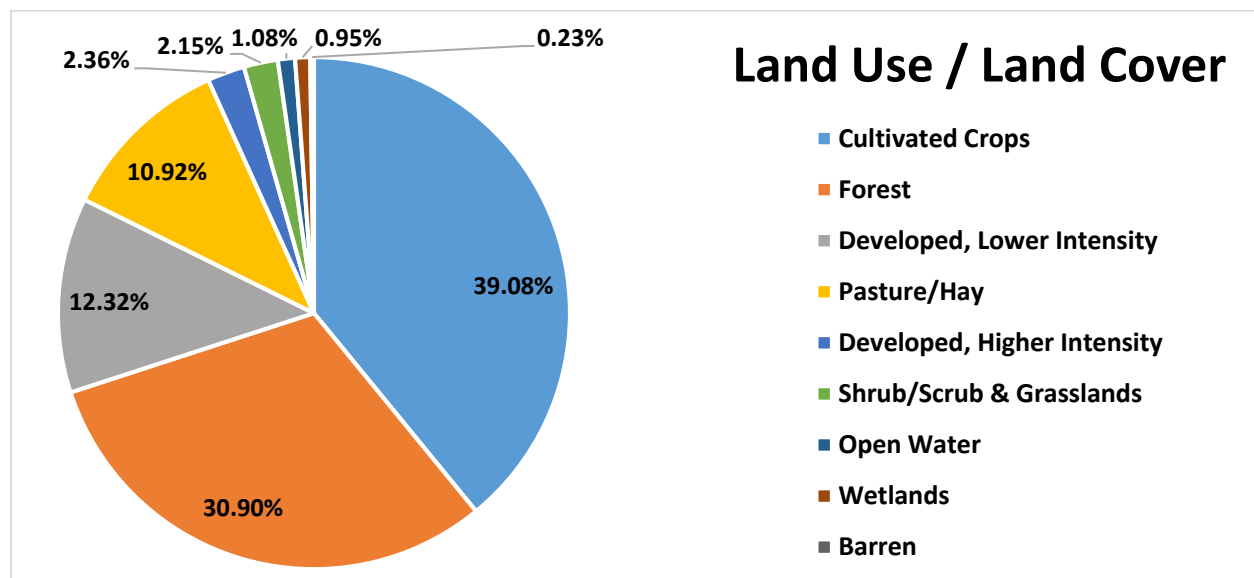


Chart 1.1.a

From the perspective of taxable land value, the distribution varies significantly from land use. Per the Ohio Development Services Agency – Ohio County Indicators Study for 2017, the State has approximately 238 billion dollars of taxable real property (See Chart 1.1.b).

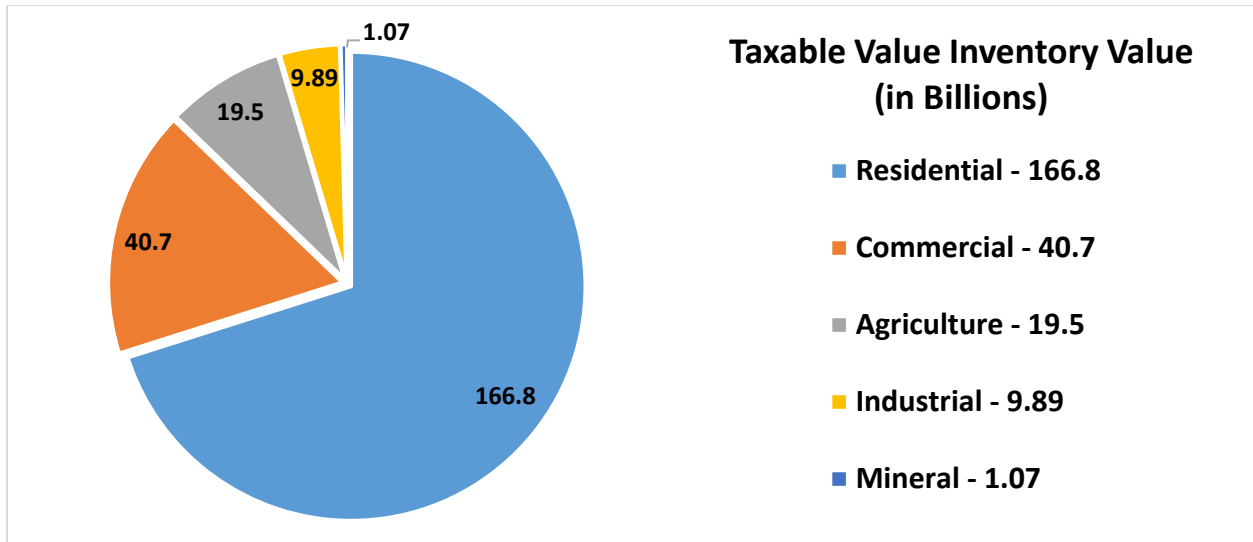
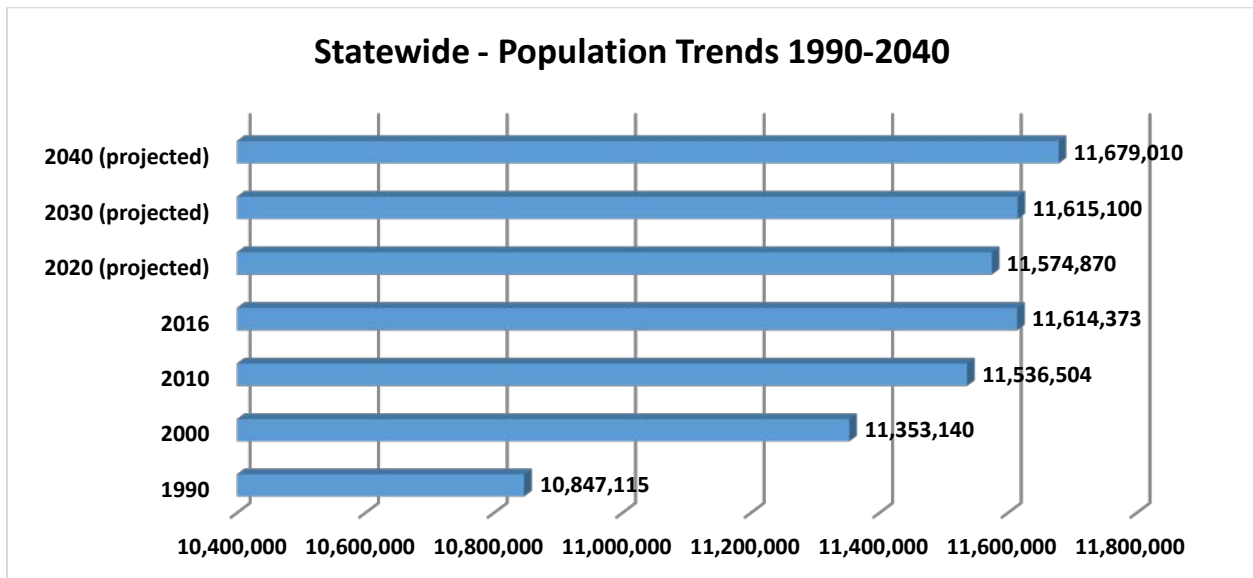


Chart 1.1.b

DEMOGRAPHY

The 2010 U.S. Census placed Ohio’s population at 11,536,504, the American Community Survey (ACS) estimates the 2016 population to be 11,614,373 and the 2010 census projected the population in 2020 to be 11,574,870 (See Graph 1.1.c).



Graph 1.1.c (projections based on 2010 census)

Based on 2017 Development Services Agency statewide data, the largest racial group in Ohio is Caucasian followed by African-American. There are a total of 2,284,674 persons falling into minority categories making up 19.7 percent of the population (See Chart 1.1.d).

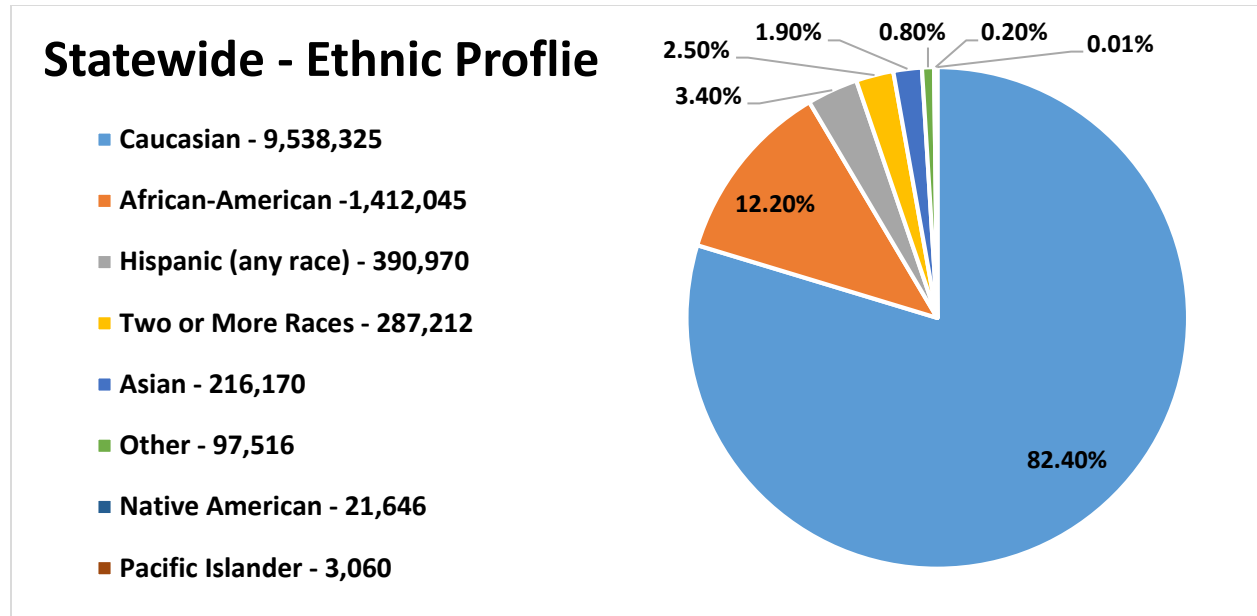


Chart 1.1.d

AGE PROFILES

The age categories, which require the most care after a disaster event, are those under 5 years of age and over 65 years of age. Statewide 6 percent of the population is under the age of 5 and 15.5 percent of the population is 65 years of age or greater. The median age of Ohioans is 39.2 years (see Chart 1.1.e).

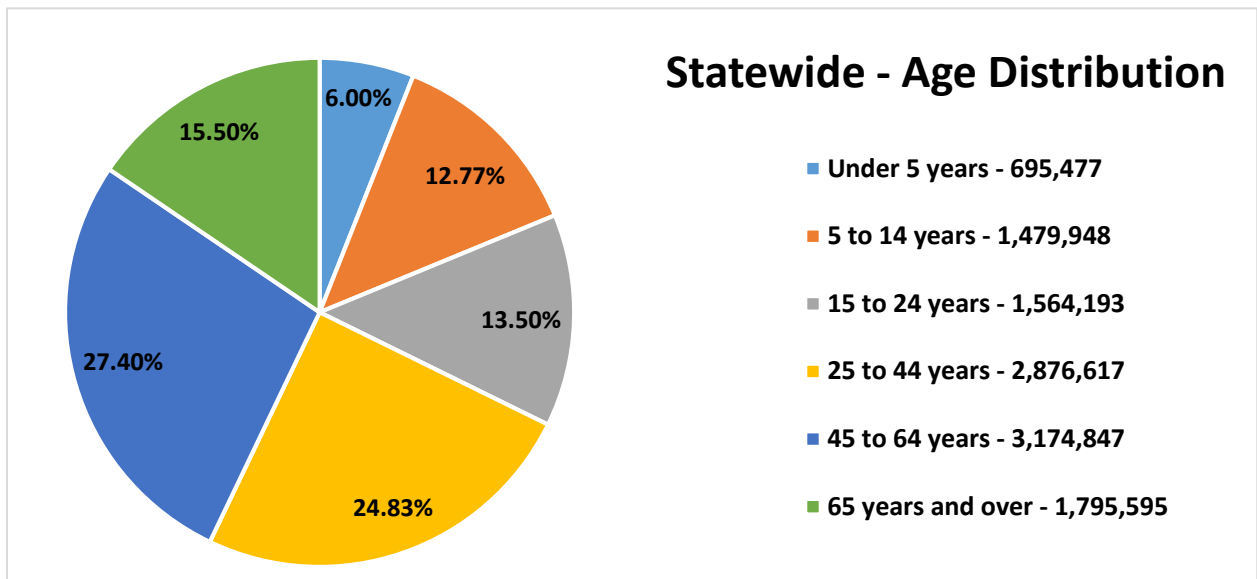
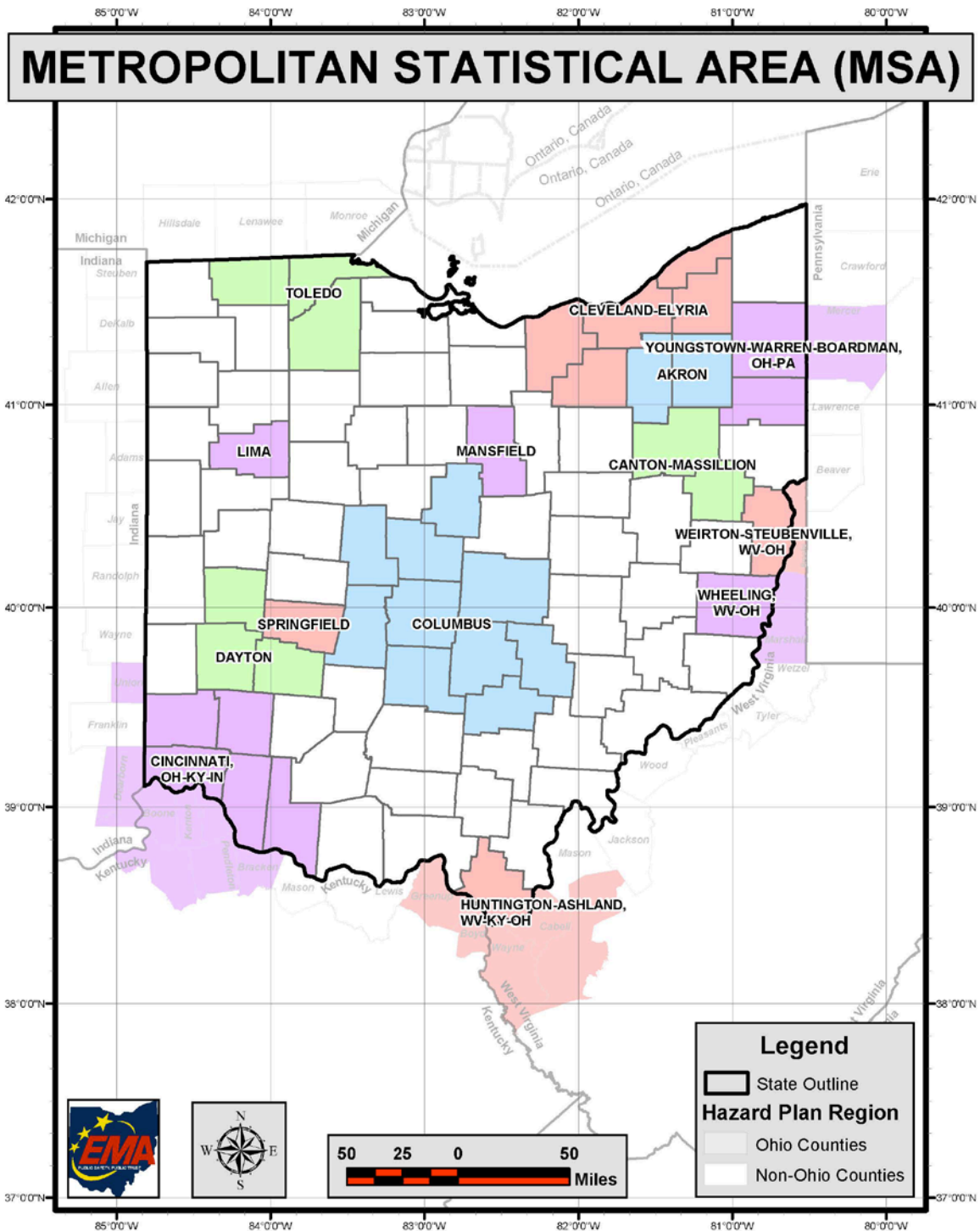


Chart 1.1.e



Map 1.1.F

Ohio is home to three large metropolitan statistical areas (MSA) located around the cities of Cleveland (2,077,240), Columbus (1,836,536) and Cincinnati (2,130,151) based on the 2010 Census. There are an additional four moderate-sized MSAs located around the cities of Akron (703,200), Dayton (841,502), Toledo (651,429), and Youngstown (565,773), see Map 1.1.f. Combined, these MSAs account for 9,120,655 people or 76.3% of the state’s population. Individual county populations range from a low of 13,435 in Vinton County to a high of 2,077,240 in Cuyahoga County.

APPALACHIA

Ohio contains a federally and state recognized region known as Appalachia. In 1965, the U.S. Congress identified counties in thirteen states along the Appalachian Mountain Range as part of the Appalachian Regional Commission. The Governor's Office of Appalachia represents the interests of the 32 counties comprising the Appalachia Region in southern and eastern Ohio (See Map 1.1.g).



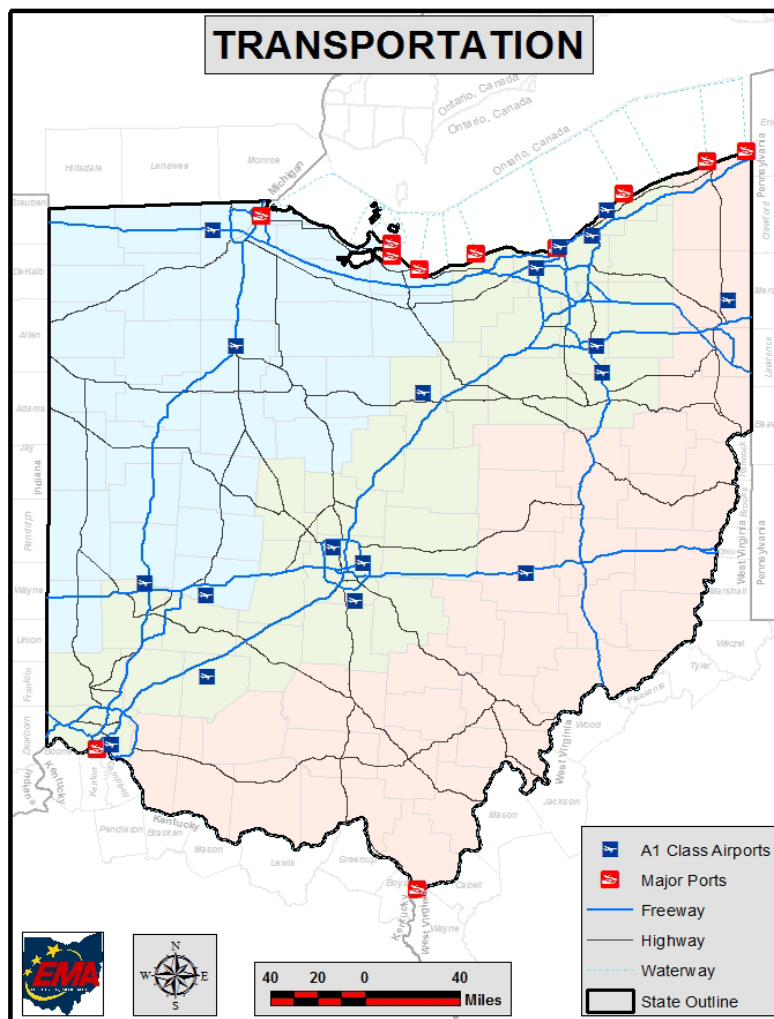
Map 1.1.g

TRANSPORTATION

Ohio has been dubbed the heart of it all connecting the eastern seaboard with the Midwest and South (See Map 1.1.h). Three major east-west interstates (I-70, I-80, and I-90) and three north-south interstates (I-75, I-71, and I-77) run through the state. Additionally, the State has a robust system of railways, airports, and sea/river ports which serve all 88 counties. Ohio’s extensive rail line system ranks 4th in total rail miles and has the highest concentration of rail lines per square mile in the nation.

Ohio is the birthplace of aviation and enjoys to this day a strong aviation system. Part of the State’s aviation heritage is the publicly-owned airport system. The system consists of seven commercial service and 97 general aviation airports and owes much of its development to a 1960’s program championed by Governor Jim Rhodes.

Ohio’s Maritime Transportation System (MTS) is a key component of the state’s multimodal transportation system. It is comprised of two major waterways Lake Erie and the Ohio River. The total MTS includes 736 navigable miles of waterway with eight principal ports on Lake Erie, 162 commercial docks, the majority of which are along the Ohio River and 9 locks and dams on the Ohio portion of the Ohio River. The ports, terminals, and docks that provide connectivity to Ohio’s MTS handle between 80 million and 100 million short tons of freight per year (2011-2015), valued at over \$12 billion (2015).



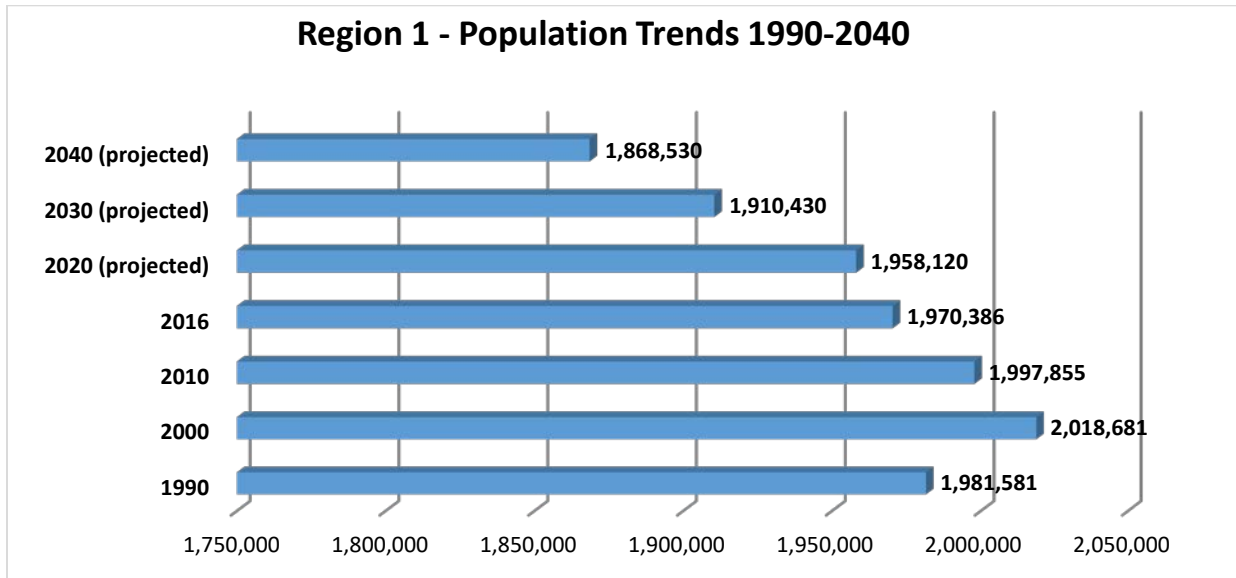
Map 1.1.h

REGION 1

Region 1 is characterized by largely rural, agricultural counties with flat to gently rolling topography. It is the western and northwestern portions of the state including portions of the state located on Lake Erie.

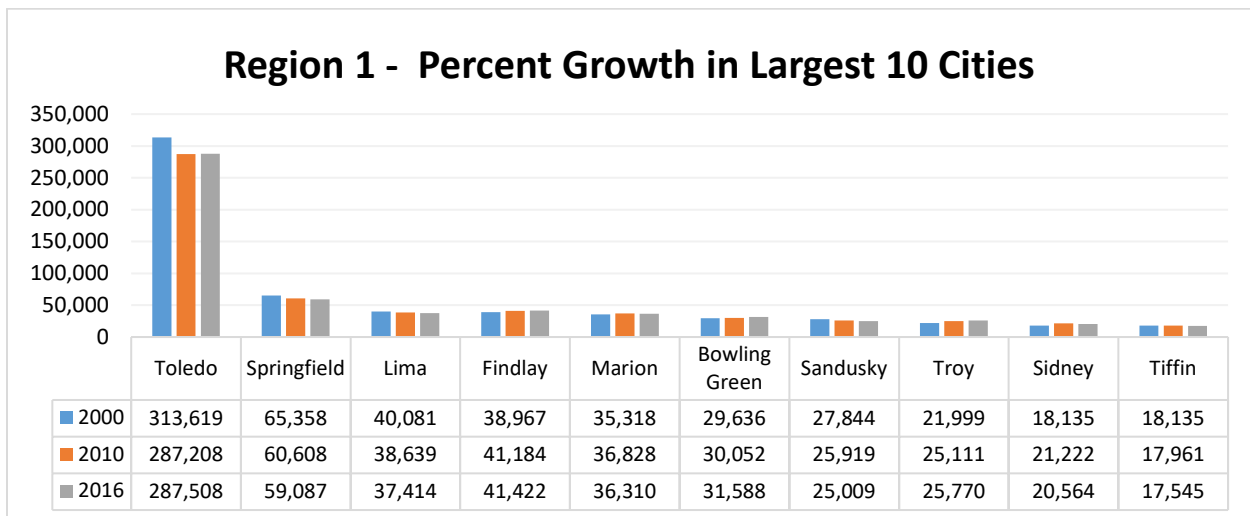
GENERAL POPULATION

The population in Region 1, according to the ACS, was 1,970,386, 17% of the Ohio total population, in 2016. Region 1 experienced minor population decreases between 1990 and 2016, with the average population decrease between these two dates being .56%. Regional contraction is expected to continue based upon current projections (See Graph 1.1.i).

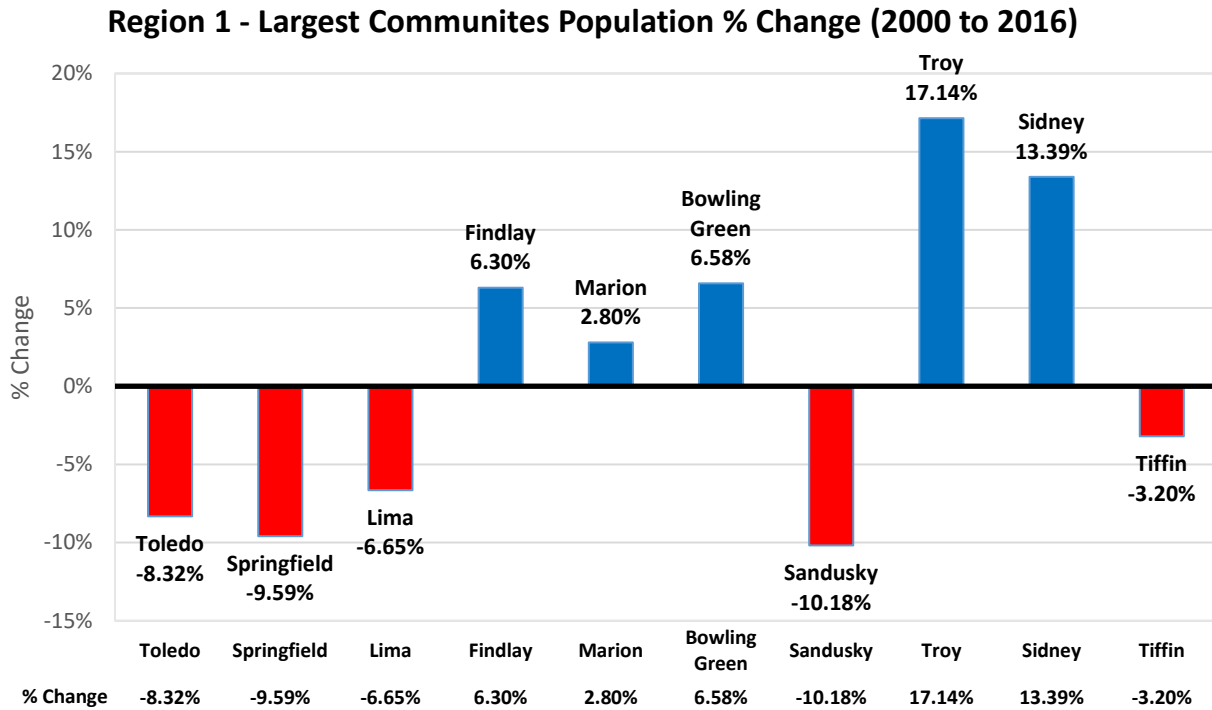


Graph 1.1.j (projections based upon the 2010 census)

Half of the ten largest communities experienced population decreases between 2000 and 2016 with Sandusky (Erie County) having the largest decrease at -10.18%. Five of the largest ten communities saw an increase with the most significant increase of 17.14% in Troy (Miami County) (See Graphs 1.1.k & 1.1.l).



Graph 1.1.k



Graph 1.1.1

SPECIAL POPULATIONS

The number of people within the special population category generally increases with the size of the county or community. These special population groups include: infant children, elderly, non-English speaking, convalescing, assisted living, and inmate populations.

CONVALESCING AND ASSISTED LIVING POPULATIONS

There are a number of facilities in Region 1 that house special or disabled populations. They include 119 nursing homes and 52 hospitals with a total of 24,610 beds. Although these facilities have their own contingency plans, they coordinate with state, county, and local hazard mitigation planning efforts.

INMATE POPULATIONS

There are four correctional facilities in Region 1 including a facility in Allen County, Lucas County, and two in Marion County. As of the fourth quarter of 2017, the combined inmate population in these facilities totals 6,725.

ETHNIC / POVERTY LEVEL CONSIDERATIONS

Caucasians comprise 89 percent of the region’s ethnic mix compared to the state’s average of 82 percent. The region’s largest minority demographic is African-American (7.19 percent) and is more concentrated in urbanized areas such as Lucas, Allen, and Clark counties (Chart 1.1.m). The Hispanic population (4.61 percent) encompasses the region’s third largest ethnic group. The main cores of Hispanic inhabitants are located in northwestern Ohio counties such as Lucas, Wood, and Sandusky.

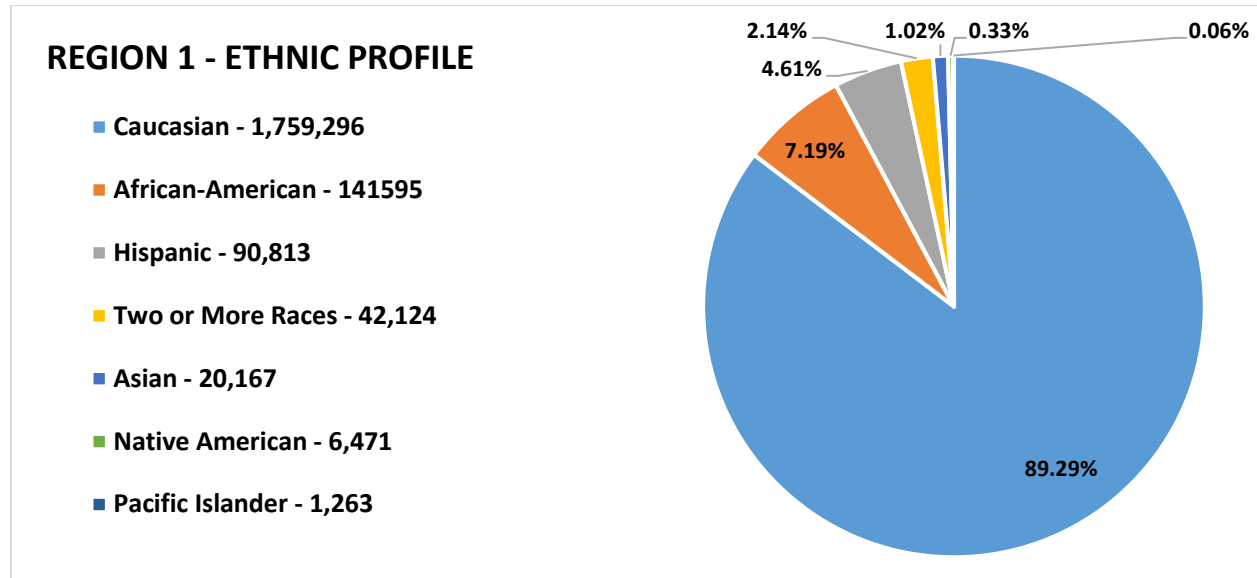


Chart 1.1.m

AGE PROFILES

The age categories which require the most care after a disaster event are the under 5 years of age and over 65 years of age. The percentage of children under the age of 5 is about the same throughout Region 1 counties, ranging from a low 4.3 percent (Ottawa) to a high 6.8 percent (Putnam). The percentage of people 65 years of age and older is also consistent with percentages ranging from a low of 13.9 percent in Wood County to a high of 22.1 percent in Ottawa county (Chart 1.1.n). The median age group in Region 1 is 40 and the highest median age for any of Ohio’s counties occurs in Region 1 (47.3 in Ottawa).

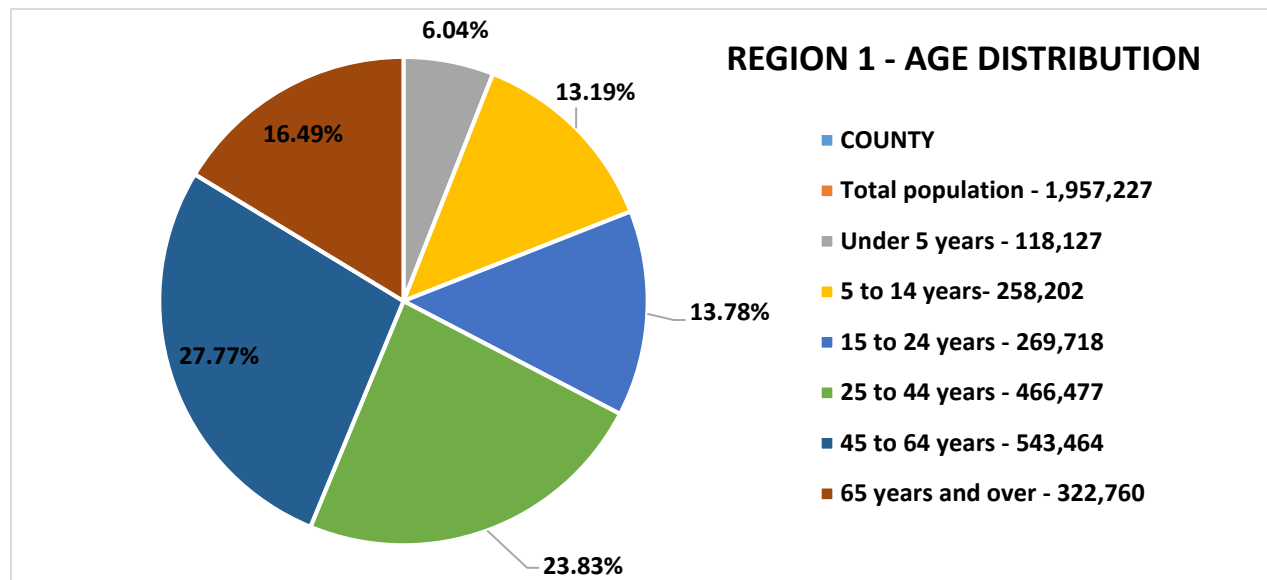


Chart 1.1.n

REGIONAL ECONOMY

The economy in Region 1 is firmly based in manufacturing both in terms of workforce and wages. Other economic sectors ranked in terms of workforce and wages include: (2) trade, transportation, and utilities,

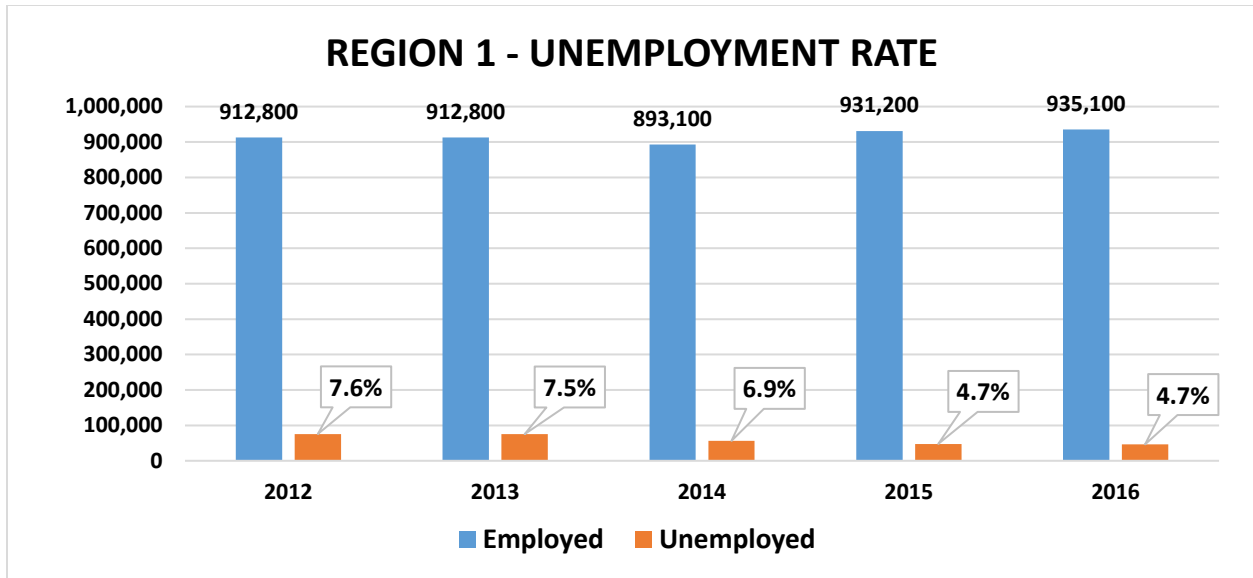
(3) education & health services, (4) leisure & hospitality, and (5) professional & business services (Table 1.1.o). While not addressed in the Bureau of Labor Statistics data, agriculture is an incredibly important economic driver in Region 1.

REGION 1 EMPLOYMENT AND WAGES BY SECTOR - 2016					
Industrial Sector	Avg. Establishment #	Average Employment	Total Wages	Avg. Weekly Wage	Annual Avg. Pay
Private Sector	40,911	739,174	\$30,640,025,866	\$759	\$39,465
Goods Producing	7,319	231,525	\$12,797,092,003	\$999	\$51,931
Natural Resources & Mining	684	8039	\$304,185,326	\$732	\$38,076
Construction	3,740	33667	\$1,923,729,043	\$966	\$50,254
Manufacturing	2,902	189,819	\$10,569,177,634	\$1,012	\$52,609
Services-Providing	33,597	507,652	\$17,842,933,863	\$613	\$31,876
Trade, Transportation & Utilities	10,102	158,620	\$5,644,399,654	\$667	\$34,700
Information	517	6859	\$297,458,088	\$727	\$37,809
Financial Services	4,064	26775	\$1,374,614,667	\$878	\$45,644
Professional & Business Services	5,378	73,837	\$3,366,502,359	\$730	\$37,933
Education & Health Services	4,985	126,871	\$5,176,396,203	\$679	\$35,324
Leisure & Hospitality	4,776	88,455	\$1,323,677,648	\$254	\$13,212
Other Services	3,756	26174	\$658,098,211	\$437	\$22,738
Federal Government	447	5503	\$324,107,403	\$1,000	\$52,011
State Government	289	15435	\$907,437,690	\$1,037	\$53,899
Local Government	2,735	89,454	\$3,653,423,587	\$735	\$38,233
Total	126,202	2,327,859	\$96,803,259,245	\$764.09*	\$39,732.06*

*shows average not total

Table 1.1.o

As the regional economic situation has improved post the late 2000's downturn, regional unemployment rates have fallen from a high in 2012 of 7.6 percent to a low of 4.75 in 2016 (Graph 1.1.p).



Graph 1.1.p

The median annual income for Region 1 households is \$48,768, which slightly exceeds that of the State of Ohio \$48,446 (see table 1.1.q). 13.6 percent of the people residing in Region 1 live below the poverty level, which is less than the state average (15.3 percent). The Region 1 counties that have comparatively high numbers of people living below the poverty level include: Hardin, Lucas, Marion, and Clark. These counties may warrant special consideration in pre- and post- disaster planning.

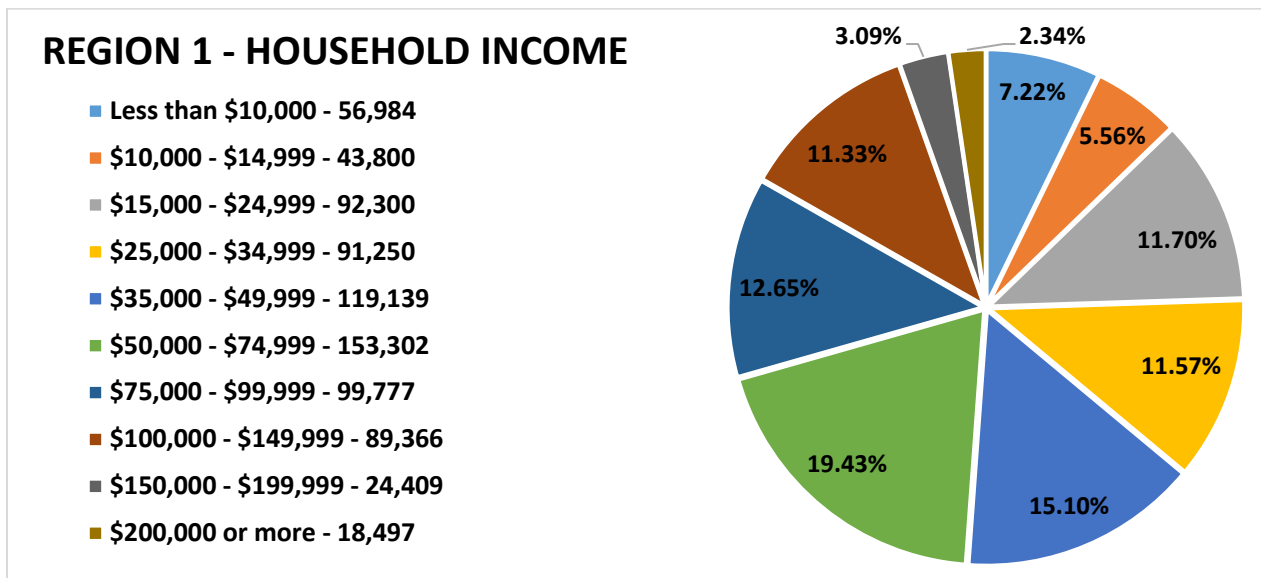


Chart 1.1.q

HOUSING

2016 ACS statistics indicate that there are approximately 887,214 housing units in Region 1, of which 99,362 (10.7 percent) are vacant (Chart 1.1.r). Ottawa and Logan counties have a surprisingly high number of vacant units. The reasons for such high vacancy rates are likely caused by housing used as seasonal and vacation property on Lake Erie, Grand Lake, St. Mary’s and Indian Lake. More than half of the houses in Region 1 were constructed before the implementation of the National Flood Insurance Program, which has important mitigation implications. It is likely that a majority of homes built in the region’s floodplains do not provide adequate flood protection.

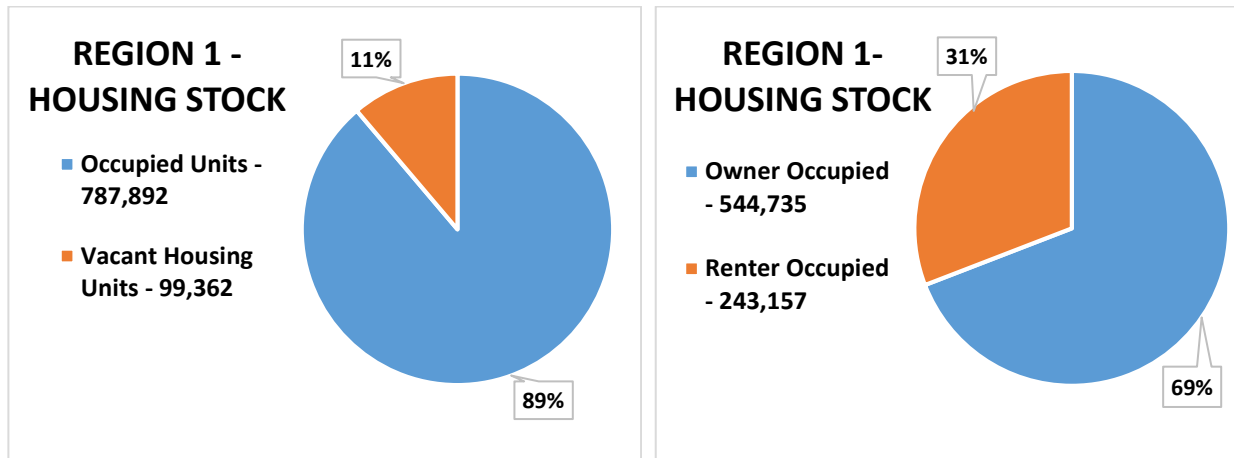


Chart 1.1.r

TRANSPORTATION

Region 1 has a well-developed transportation system, despite the fact that 15 of its 29 counties do not have interstate highways. State and U.S. highways coupled with extensive rail networks help meet the ground transportation needs in Region 1. Every county but two in Region 1 have at least 1 commercial airport and three of the counties bordering Lake Erie have ports (Table 1.1.s).

REGION 1 TRANSPORTATION SYSTEMS						
Counties	Interstate Highways	U.S. Highways	Rail Lines	Class A Airports	Total Airports	Lake Ports
Allen	X	X	4		1	
Auglaize	X	X	3		1	
Champaign		X	2		2	
Clark	X	X	3	1	1	
Crawford		X	3		1	
Darke		X	2		1	
Defiance		X	2		1	
Erie	X	X	1		3	2
Fulton	X	X	2		1	
Hancock	X	X	2	1	2	
Hardin		X	1		3	
Henry		X	3		1	
Huron		X	3		2	

Logan		X	2		1	
Lucas	X	X	3	1	2	1
Marion		X	2		1	
Mercer		X	1		2	
Miami	X	X	1		3	
Ottawa	X	X	2		5	1
Paulding		X	2			
Preble	X	X	1			
Putnam		X	3		2	
Sandusky	X	X	2		2	
Seneca		X	3		4	
Shelby	X		2		1	
Van Wert		X	2		1	
Williams	X	X	2		1	
Wood	X	X	2		4	
Wyandot		X	2		1	

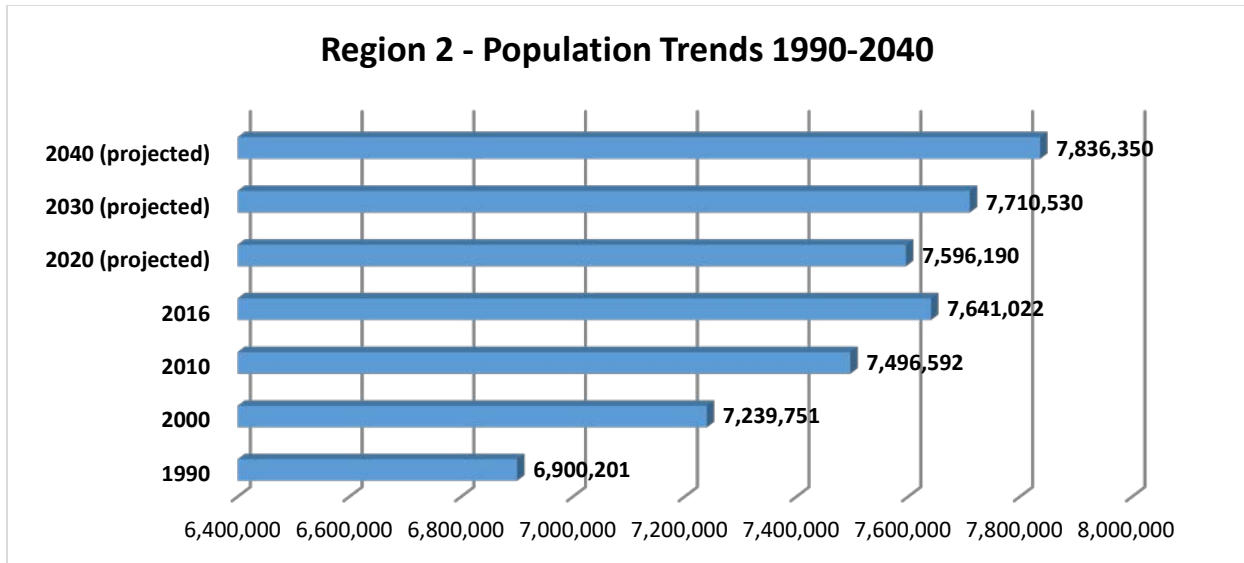
Table 1.1.s

REGION 2

Region 2 is defined by the I-71 corridor and contains Ohio's three largest cities: Cleveland, Columbus, and Cincinnati. Geographically it is the boundary between the previously glaciated portion of the state and the unglaciated Appalachian region.

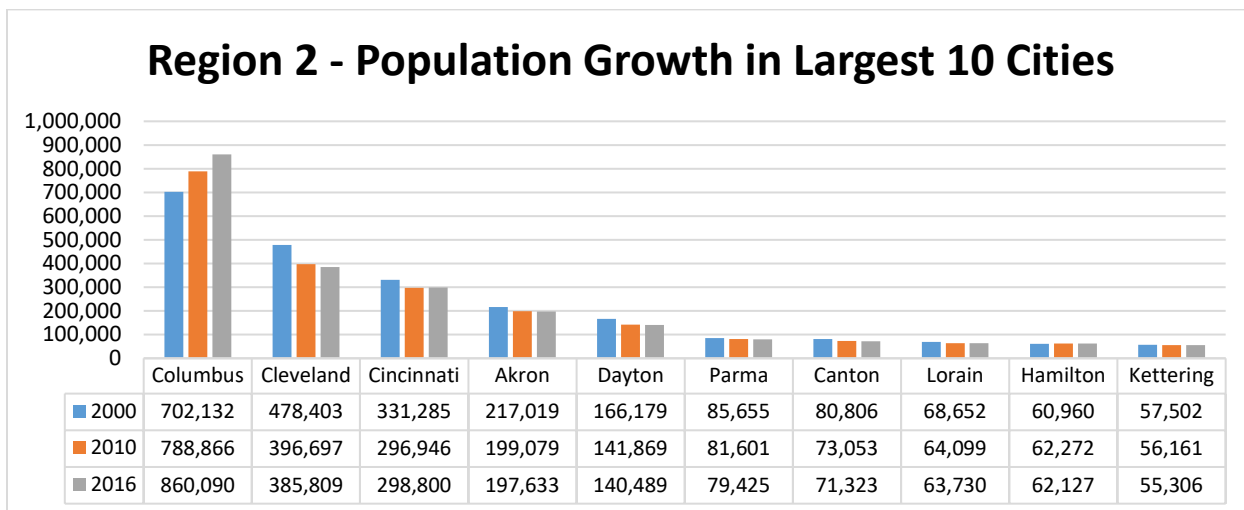
GENERAL POPULATION

The population in Region 2, according to the ACS was 7,641,022, 66% of the total population of Ohio, in 2016. The Region has experienced consistent population growth since 1990. The regional growth rate between 2000 and 2016 was 5.54% and this regional growth is expected to continue through 2040 (Graph 1.1.t). The majority of counties in Region 2 experienced minor changes in their population size, but there were several outliers. Delaware grew at a 58.4% while Cuyahoga declined by -8.2% in the same time period.

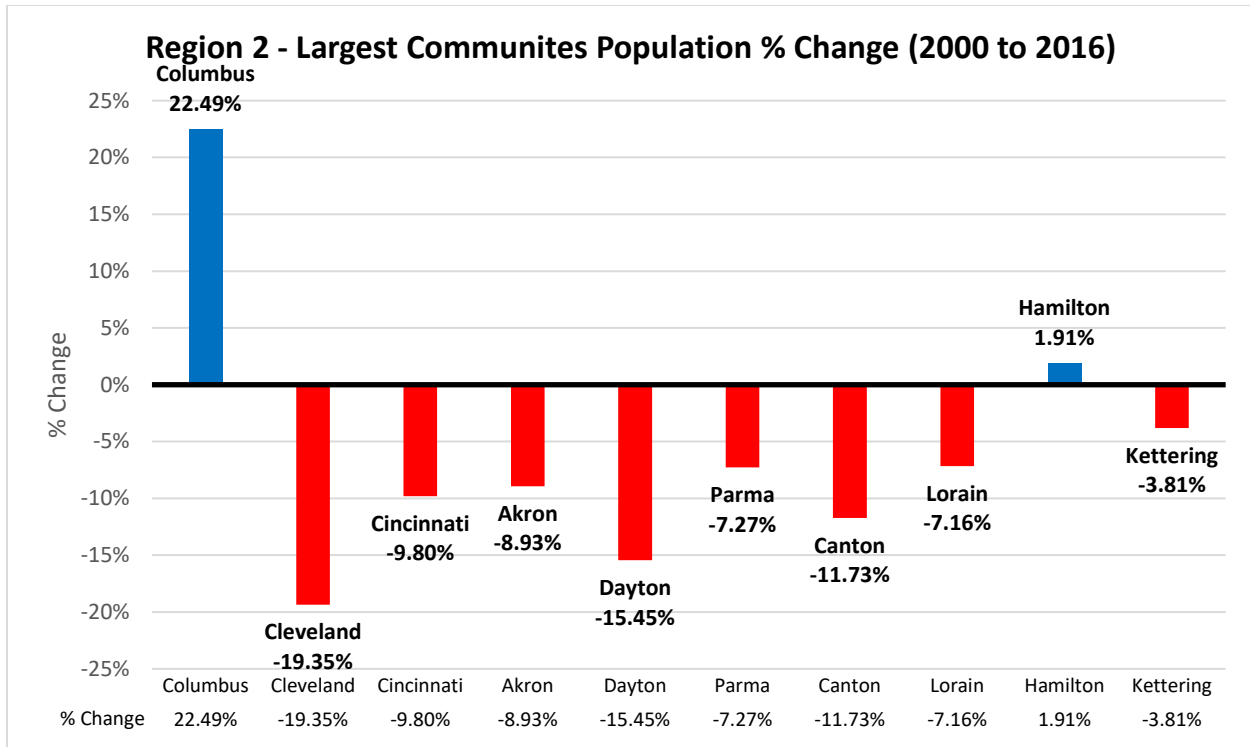


Graph 1.1.t

Eight of the ten largest communities experienced population decreases between 2000 and 2016 with the Cleveland (Cuyahoga County) having the largest decrease at -19.35 percent. The community that saw the largest increase was the Columbus (Franklin) with an increase of 22.49 percent (Graphs 1.1.u & 1.1.v).



Graph 1.1.u



Graph 1.1.v

SPECIAL POPULATIONS

The number of people within the special population category generally increases with the size of the county or community. These special population groups include: infant children, elderly, non-English speaking, convalescing, assisted living, and inmate populations. Eight of the ten most-populated counties are in Region 2. Emergency managers and mitigation planners must pay particular attention to counties having larger numbers of special populations (Cuyahoga, Hamilton, and Franklin counties).

CONVALESCING AND ASSISTED LIVING POPULATIONS

There are a large number of hospitals (122) and nursing homes (547) in Region 2 and they account for 85,306 beds. Although these facilities have their own contingency plans, they must be coordinated with state, county, and local hazard mitigation planning efforts.

INMATE POPULATIONS

There are 15 prisons within Region 2 with a total inmate population of 27,101. The follow counties have prisons: Pickaway, Montgomery, Franklin, Lorain, Warren, Madison, Lorain, Madison, Richland, Cuyahoga, Union, Pickaway, Richland, and Fairfield, and Warren. Each prison has a contingency plan that addresses a variety of circumstances. The challenge then is coordination with prison officials.

ETHNIC / POVERTY LEVEL CONSIDERATIONS

The minority population in Region 2 is 1,916,998 or 25.1 percent of the total population in Region 2 (See Chart 1.1.w). African-Americans are the largest minority (16.4 percent) followed by Hispanics (3.8 percent), and Asians (2.9 percent). Their concentrations within the largest communities may be linked to the availability of jobs in the area. The greatest concentration of people with limited English skills is in those counties with the greatest Hispanic populations (Lorain, Cuyahoga, and Franklin).

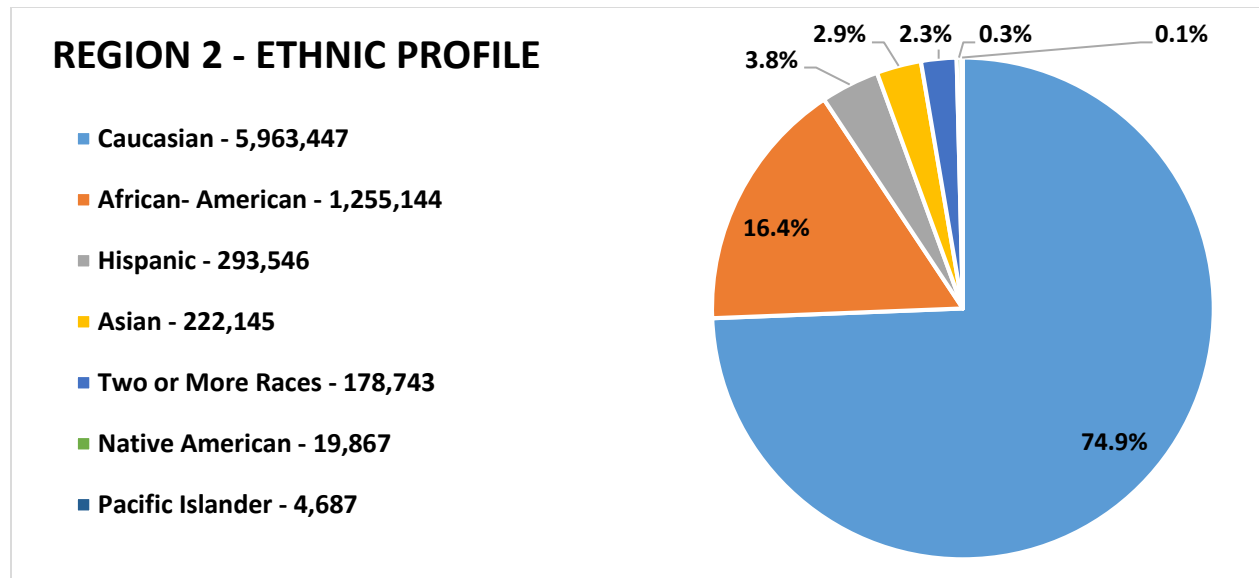


Chart 1.1.w

AGE PROFILES

The median age in Region 2 is 39.5. The age population categories which require the most care after a disaster event are the under 5 years of age and over 65 years of age. The percentage of children under the age of 5 is about the same throughout Region 2 counties with percentages ranging from a low of 4.6 percent in Portage County to a high of 7.2 percent in Franklin County. The percentage of people 65 years of age and older is also consistent with percentages ranging from a low of 11.2 percent in Union County to a high of 18 percent in Richland County (Chart 1.1.x).

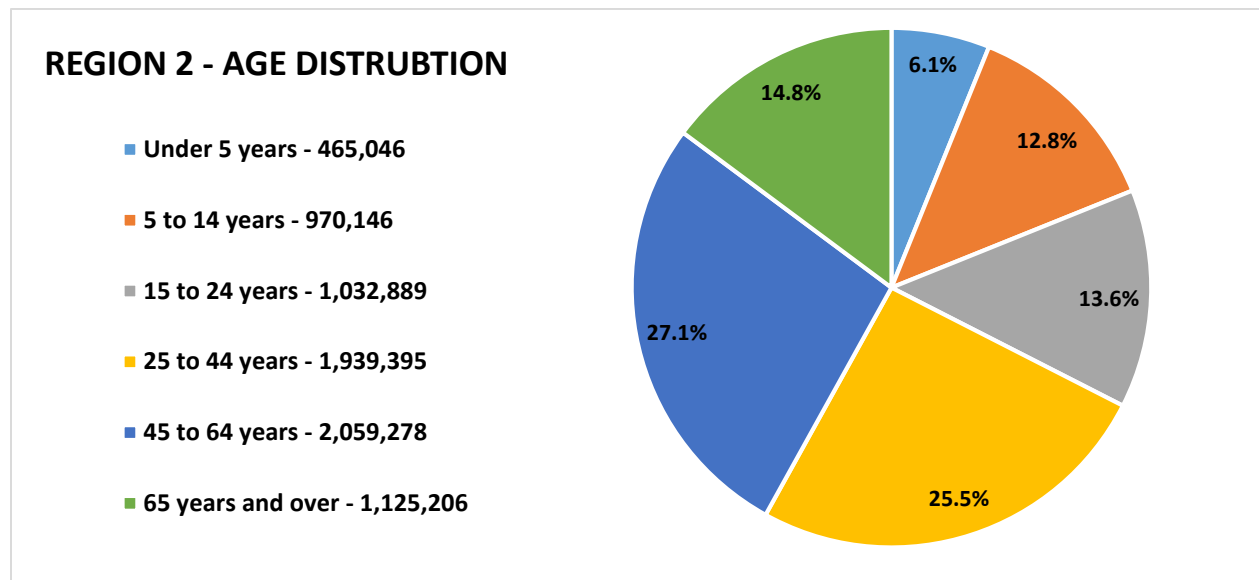


Chart 1.1.x

REGIONAL ECONOMY

Trade, transportation, and utilities are the region's principal economic sector. Other sectors, in order of economic importance, include (2) education & health services, (3) professional & business services, (4) manufacturing, and (5) leisure & hospitality (Table 1.1.y).

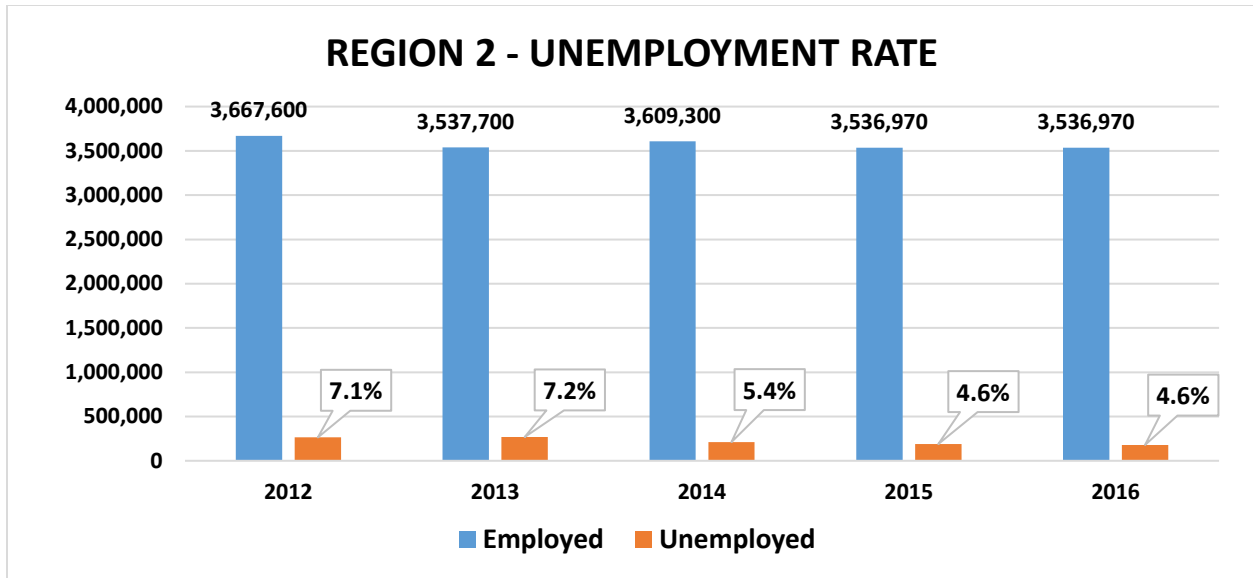
REGION 2 EMPLOYMENT AND WAGES BY SECTOR - 2016					
Industrial Sector	Avg. Establishment #	Average Employment	Total Wages	Avg. Weekly Wage	Annual Avg. Pay
Private Sector	181,079	3,220,086	\$158,026,634,922	\$832	\$43,271
Goods Producing	25,016	555,616	\$33,473,616,428	\$1,092	\$56,788
Natural Resources & Mining	986	10,860	\$456,778,368	\$758	\$39,390
Construction	14,011	138,150	\$7,992,588,068	\$1,035	\$53,803
Manufacturing	10,023	406,604	\$25,024,249,992	\$1,115	\$57,958
Services-Providing	156,065	2,664,473	\$124,553,018,494	\$739	\$38,403
Trade, Transportation & Utilities	41,373	684,948	\$28,374,382,400	\$709	\$36,865
Information	2,641	54,646	\$3,782,499,509	\$1,034	\$53,772
Financial Services	19,439	221,795	\$15,545,488,310	\$1,035	\$53,792
Professional & Business Services	35,114	559,625	\$36,036,405,318	\$955	\$49,632
Education & Health Services	22,621	642,552	\$29,518,603,941	\$761	\$39,596
Leisure & Hospitality	18,600	390,901	\$7,685,172,855	\$306	\$15,907
Other Services	15,869	109,560	\$3,592,961,991	\$553	\$28,750
Federal Government	821	63,751	\$4,921,759,094	\$1,221	\$63,474
State Government	546	87,616	\$5,730,220,090	\$1,029	\$53,494
Local Government	5,802	321,989	\$15,472,310,188	\$766	\$39,836
Total	550,006	10,133,172	\$500,186,689,968	\$871.08*	\$45,295.73*

*Shows average not total

Table 1.1.y

The region contains the Cleveland-Columbus Cincinnati corridor which follows Interstate 71. Interstate 71 bisects the region from southwest to northeast and links to other freeways leading to both the Midwestern parts of the county and the eastern seaboard. Region 2 has a strong logistics industry and contains the majority of the state's rail lines with several intermodal sites. Region 2 also is home to many of the largest universities and colleges, which are typically clustered near the larger metropolitan statistical areas. This accounts for the slight employment increase in the education and health sectors as many of the universities are associated with the hospitals which are also teaching facilities. The region is home to aerospace and defense industries such as General Electric Aircraft Engines in Cincinnati, and Wright-Patterson Air Force Base in Dayton. While not addressed in the Bureau of Labor Statistics data, agriculture is an important economic driver in Region 2.

Region 2's unemployment rates have decreased from a high in 2012 of 7.1 percent to a low of 4.6 percent in 2016 (Graph 1.1.z).



Graph 1.1.z

The median annual household income in Region 2 is \$55,596, which exceeds that of the state (\$48,446). There are 13.1 percent of people living at or below the poverty level in Region 2, this is less than the state on average (15.3 percent). The Region 2 counties that have comparatively high numbers of people living below the poverty level include: Cuyahoga, Montgomery, Fayette, and Hamilton. These counties may warrant special consideration in pre- and post- disaster planning (Chart 1.1.aa).

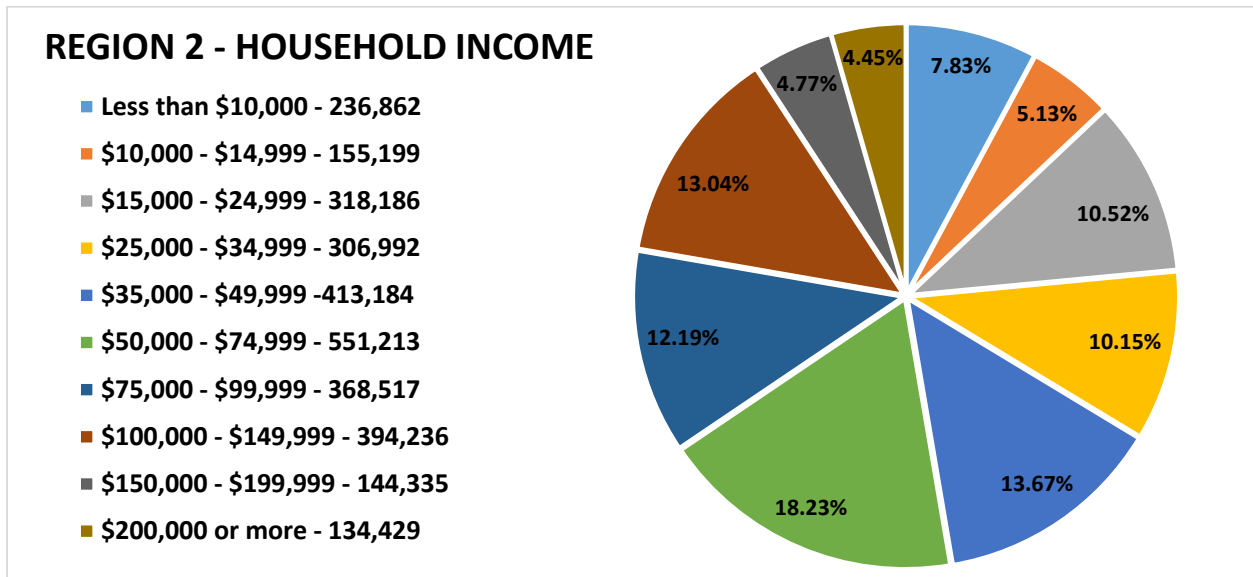


Chart 1.1.aa

HOUSING

About one half of Region 2’s housing stock was constructed prior to 1968, when the National Flood Insurance Program was created. This implies that a large number of houses constructed in the region’s floodplains do not have adequate flood protection. Most of the homes in Region 2 are owner occupied

(64.2 percent), as opposed to those occupied by renters (35.71 percent). The number of vacant homes is relatively low (11.5 percent), but livability of these vacant homes is unknown (Chart 1.1.bb).

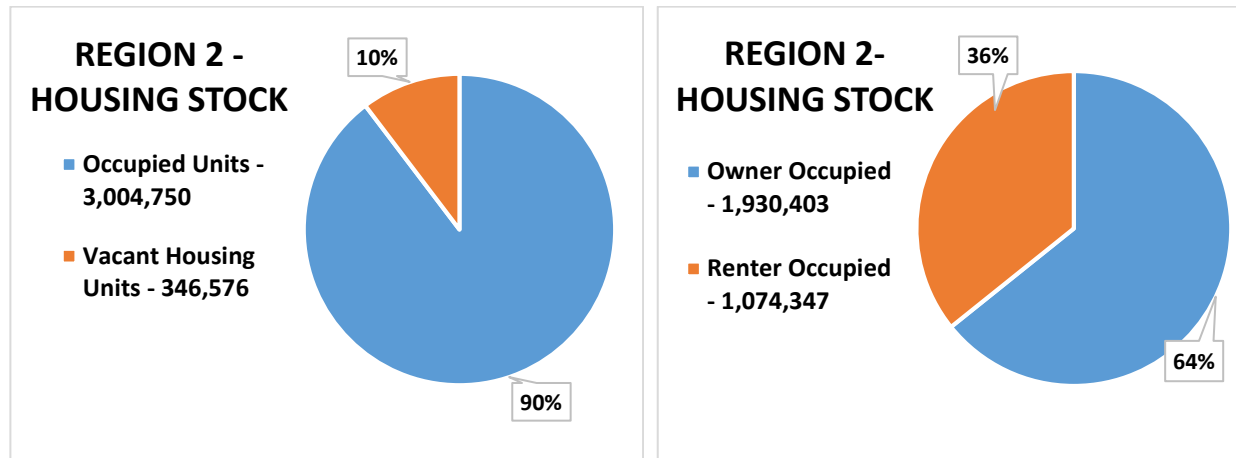


Chart 1.1.bb

TRANSPORTATION

Region 2 has a well-developed transportation system, which includes 14 Class A airports and at least one commercial airport in every county. Geauga and Knox Counties are the only Region 2 counties that do not have interstate highways. All counties are served by the U.S. Highway system and a variety of rail lines. The region possesses both lake and river port facilities (Table 1.1.cc).

REGION 2 TRANSPORTATION SYSTEMS						
Counties	Interstate Highways	U.S. Highways	Rail Lines	Class A Airports	Total Airports	Lake ports/ River ports
Ashland	X	X	3		2	
Butler	X	X	3		3	
Clinton	X	X	1	1	3	
Cuyahoga	X	X	7	3	4	1
Delaware	X	X	2		2	
Fairfield	X	X	2		2	
Franklin	X	X	4	3	7	
Gauga		X	1		2	
Green	X	X	1	*	1	
Hamilton	X	X	6	1	2	6
Knox		X	1		3	
Lake	X	X	2	1	2	1
Licking	X	X	3		2	
Lorain	X	X	4		5	1
Madison	X	X	4		1	
Medina	X	X	3		3	
Montgomery	X	X	3	1	7	

Pickaway	X	X	3		2	
Portage	X	X	4		2	
Richland	X	X	4	1	4	
Stark	X	X	5	1	3	
Summit	X	X	6	2	5	
Union		X	1		1	
Warren	X	X	5		2	
Wayne	X	X	5		1	

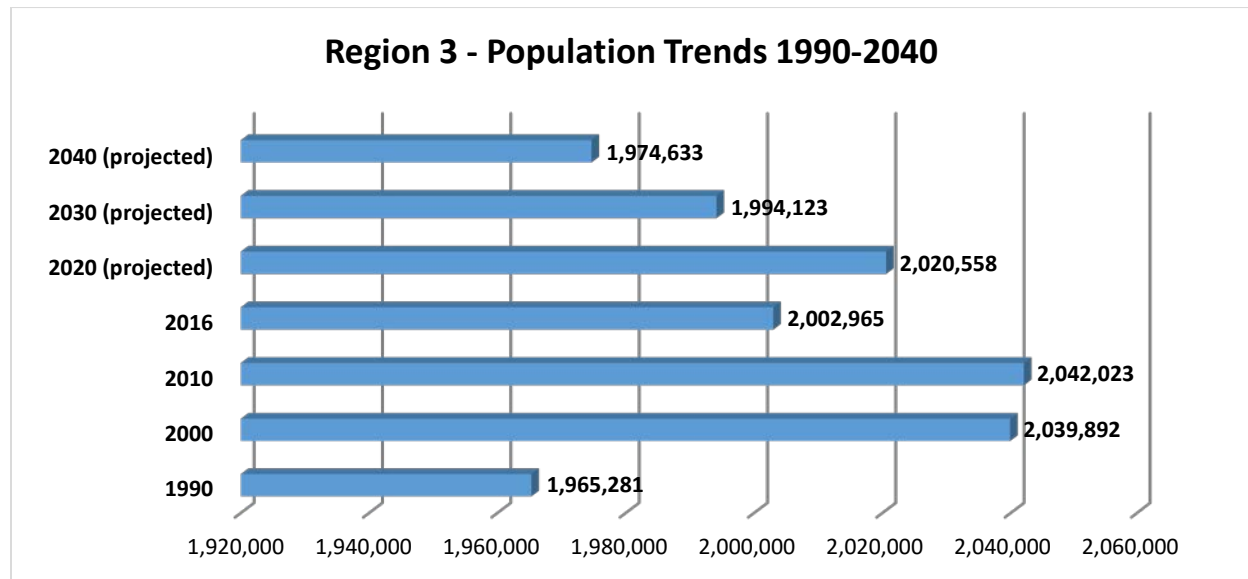
Table 1.1.cc – * Wright Patterson Airforce Base is not a commercial airport

REGION 3

Region 3 is defined largely as the Appalachian region of Ohio. This region consists largely of the Appalachian foothills, and also is the area of the state that has the most exposure to the Ohio River, a significant flooding source in the state.

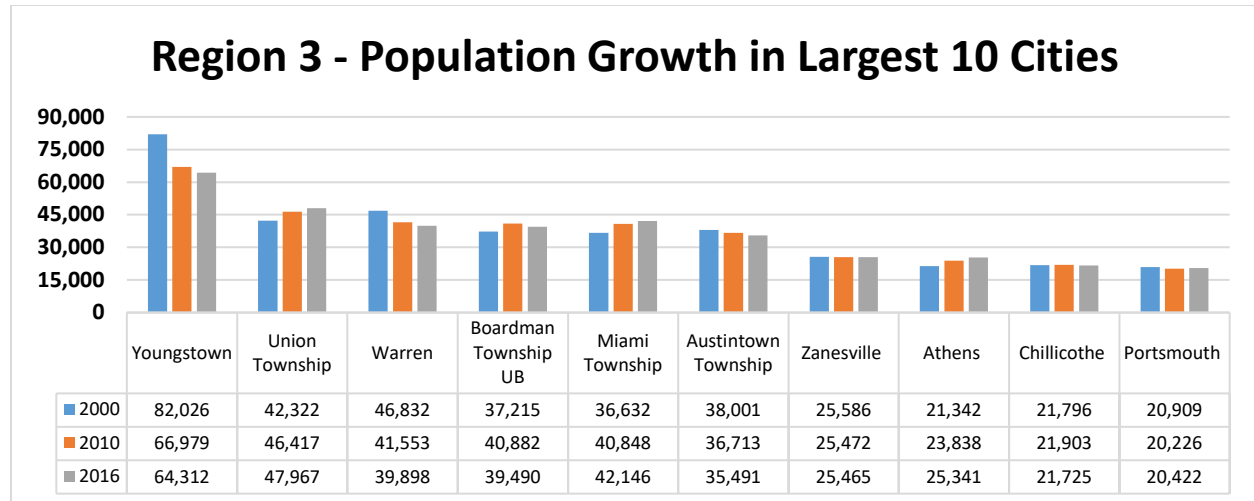
GENERAL POPULATION

The population of Region 3 in 2016 was 2,002,965, approximately 17% of the total population of Ohio, per the 2016 ACS. The region experienced a minor decrease of 36,927 people over a 16-year period (Graph 1.1.dd).

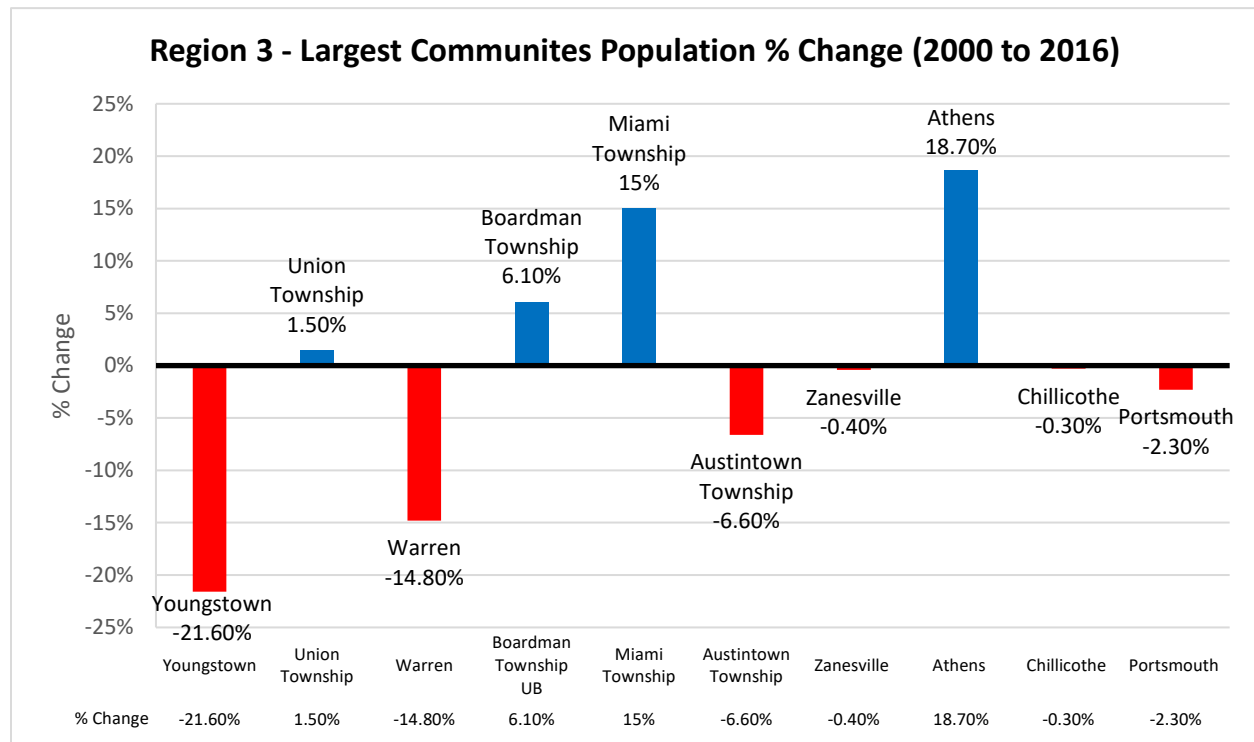


Graph 1.1.dd (projects based upon 2010 census)

The region as a whole has seen a minor decrease in population, the majority of the region’s largest cities and areas have experienced larger losses in population between 2000 and 2016 (see Graph 1.1.dd). The greatest percentage loss of population occurred in Youngstown (Mahoning) with the city losing 21.6 percent of its population, while the greatest percentage increase in population occurred in Athens (Athens) gaining 18.7 percent (Graphs 1.1. ee & 1.1. ff).



Graph 1.1. ee



Graph 1.1. ff

SPECIAL POPULATIONS

There is a significant part of the population in Region 3 that could require higher levels of assistance before and after a disaster occurs. These special population groups include: infant children, elderly, non-English speaking, convalescing, assisted living, and inmate populations.

CONVALESCING AND ASSISTED LIVING POPULATIONS

The convalescing and assisted living populations include hospitals, and nursing homes. There are 209 nursing homes and 49 hospitals in Region 3 with a total of 24,654 beds. There also are three psychiatric

hospitals in the region. Although these facilities have their own contingency plans, they coordinate with state, county, and local hazard mitigation planning efforts.

INMATE POPULATIONS

Region 3 also contains nine prisons, which are spread across the region. The inmate population is 15,497, with Ross and Belmont Counties holding the largest percentage of inmates.

ETHNIC / POVERTY LEVEL CONSIDERATIONS

Approximately 90.9% of the Region 3 is Caucasian. This leaves a total minority population of 178,573, the total minorities category is computed by subtracting the non-Hispanic-one-race-only whites from the total population. The African-American (4.4 percent) and Hispanic (2.0 percent) populations in Region 3 are comparatively small. The largest percentages of African Americans reside in Mahoning, Trumbull, and Ross counties. The majority of Hispanics reside in Mahoning, Ashtabula, and Clermont counties. Twenty- eight of the thirty-two counties within the region exceed the state’s average poverty level (15.3 percent) with Athens County having highest poverty level in the state (33 percent). Counties that are below the poverty level face potentially severe implications of ensuring that mitigation actions are implemented and often must depend on outside resources (Chart 1.1.gg).

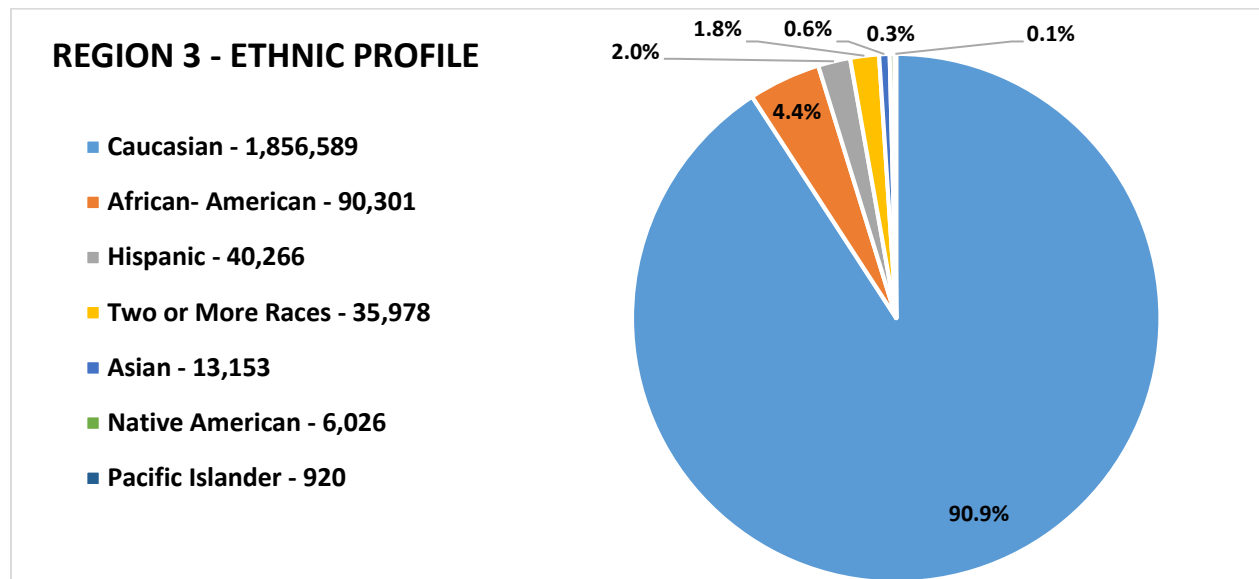


Chart 1.1.gg

AGE PROFILES

The median age in Region 3 is 41.3 years, which does not vary significantly from that in Region 1 or Region 2. The two populations, which often require special attention during disaster times are children under the age of 5 and those over the age or 65. At present, approximately 5.6 percent of the region’s population is less than 5 years of age and 17.24 percent of the population is 65 or older. Within the region Trumbull and Mahoning counties contain the largest population 65 years or older. Clermont County contains the highest number of population under the age of 5 (Chart 1.1.hh).

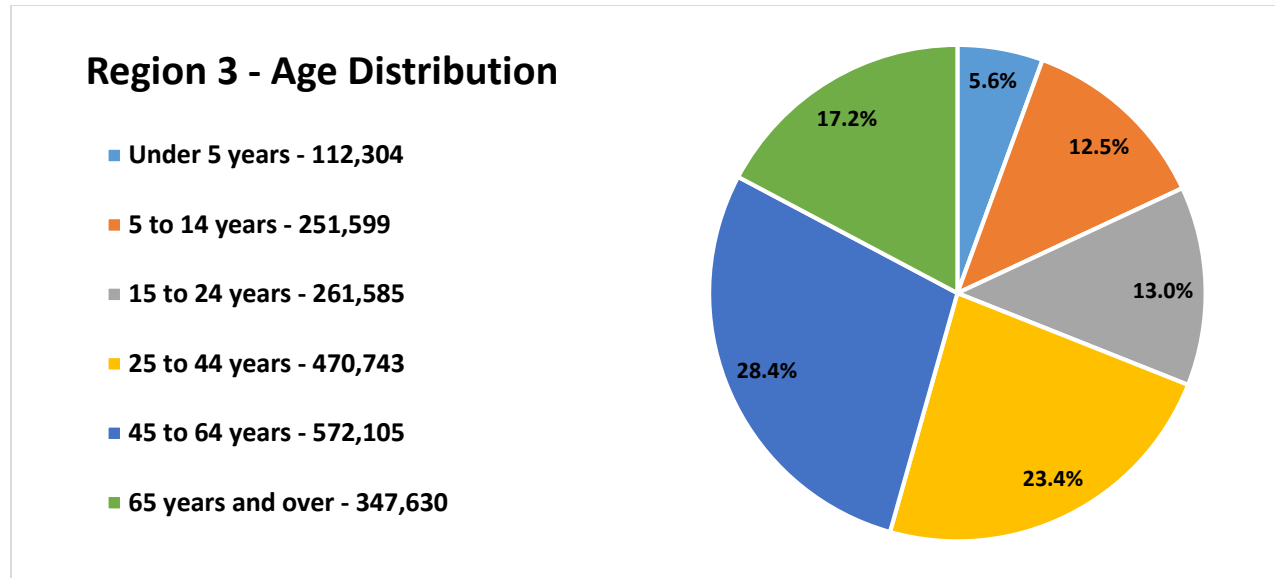


Chart 1.1.hh

REGIONAL ECONOMY

Trade, transportation, and utilities are the region’s principal economic sector. Other sectors, in order of economic importance, include (2) health care, (3) professional & business services, (4) leisure and hospitality, and (5) construction (Table 1.1.ii).

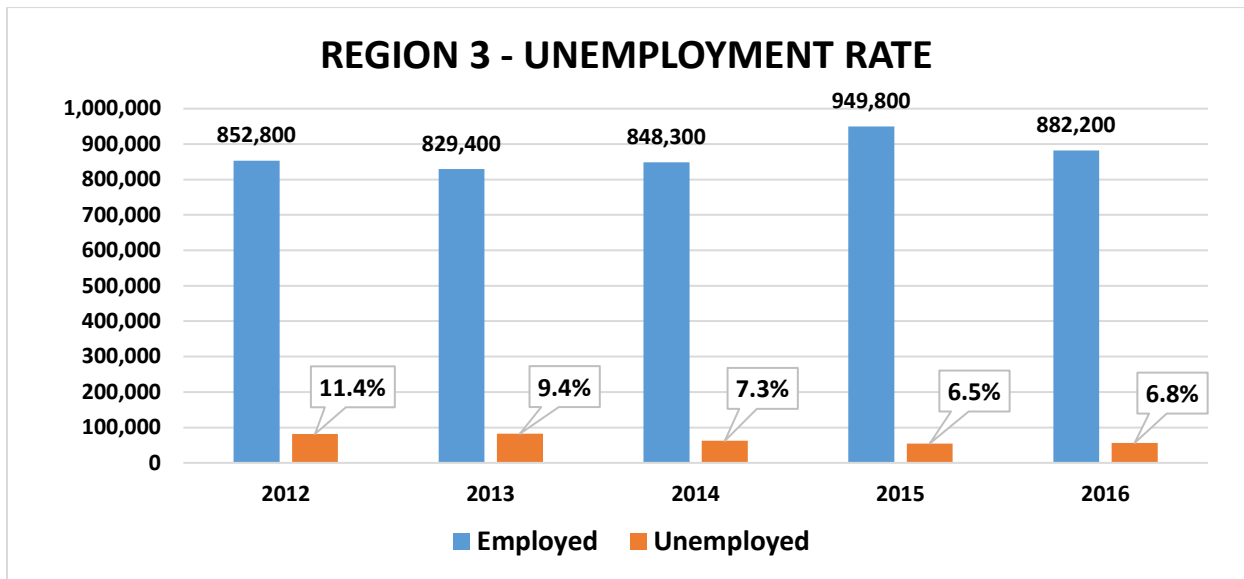
REGION 3 EMPLOYMENT AND WAGES BY SECTOR - 2016					
Industrial Sector	Avg. Establishment #	Average Employment	Total Wages	Avg. Weekly Wage	Annual Avg. Pay
Private Sector	33,115	469,459	\$17,637,738,630	\$691	\$35,918
Goods Producing	6,210	108,578	\$5,635,824,163	\$947	\$49,267
Natural Resources & Mining	637	5,644	\$299,016,240	\$860	\$44,721
Construction	3,441	25,259	\$1,283,591,263	\$919	\$47,772
Manufacturing	2,137	77,153	\$4,027,941,773	\$891	\$46,343
Services-Providing	26,904	360,884	\$12,001,914,467	\$600	\$31,190
Trade, Transportation & Utilities	8,422	117,855	\$4,012,257,295	\$627	\$32,603
Information	370	5,316	\$281,441,303	\$720	\$37,461
Financial Services	3,052	19,081	\$892,839,264	\$777	\$40,395
Professional & Business Services	4,279	44,504	\$1,831,576,148	\$720	\$37,429
Education & Health Services	4,360	98,183	\$3,728,667,396	\$652	\$33,927
Leisure & Hospitality	3,450	59,848	\$842,368,865	\$256	\$13,315
Other Services	2,945	15,967	\$408,676,408	\$443	\$23,027
Federal Government	422	6,348	\$383,777,816	\$1,014	\$52,708
State Government	274	11,418	\$602,954,195	\$981	\$50,988
Local Government	2,412	69,662	\$2,655,536,216	\$693	\$36,031
Total	102,430	1,495,159	\$56,526,121,442	\$736.89*	\$38,318.60*

*Shows average not total

Table 1.1.ii

The 2010-2015 boom in the oil and gas industries in the state has slowed due to a number of reasons. Per the Ohio Oil and Gas Association, the number of oil and gas permits dropped by 44 percent in 2016. There were 561 permits issued in 2016, down from 997 in 2015. The drop is even more severe when compared with 2014, when there were 1,659 permits issued by state regulators at the peak of the state’s Utica shale-driven boom in oil and natural gas extraction: Last year’s 561 permits marks a 66 percent drop from 2014. This slowdown has caused the drop in the number of construction jobs in Region 3 from previous years. While not addressed in the Bureau of Labor Statistics data, agriculture is an important economic factor in Region 3.

Regional unemployment rates fluctuated between 2012 and 2016, from a high of 11.4% in 2012 to a low of 6.5% in 2015 (Graph 1.1.jj).



Graph 1.1.jj

In 2016, the median household income in Region 3 was \$43,441 which is considerably lower than the state (\$49,492) and national (\$52,334) median incomes (Chart 1.1.kk).

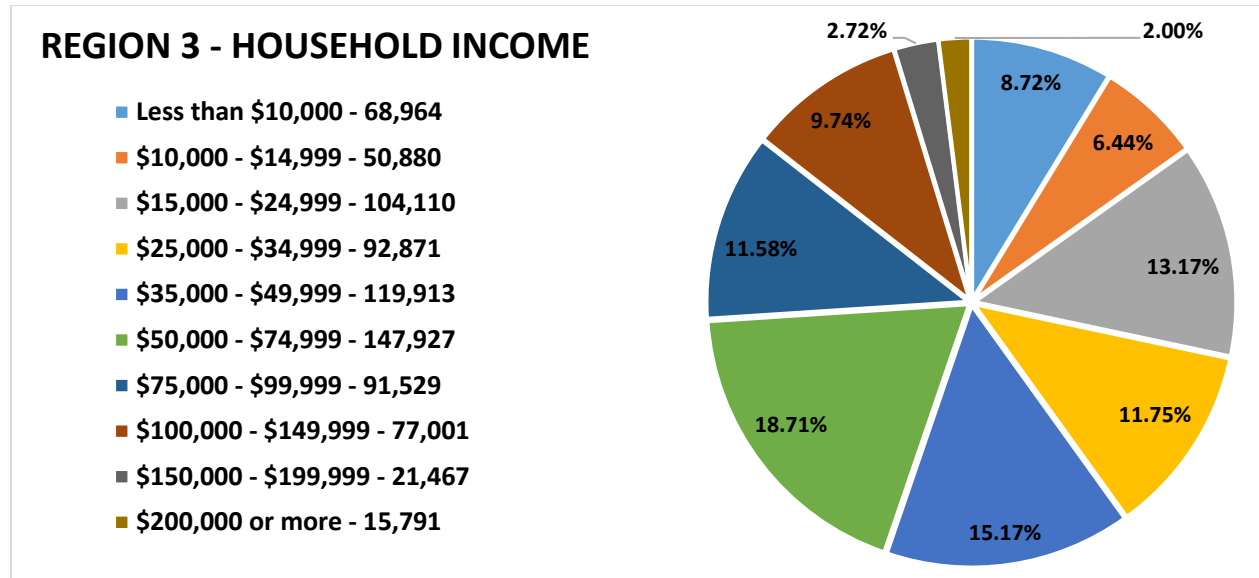


Chart 1.1.kk

HOUSING

There were 897,382 housing units in Region 3 (Chart 1.1.ii). The majority of the homes (71 percent) are owner-occupied and about 29 percent are rentals. Of the housing stock 12 percent of the region’s stock was vacant. According to the Ohio DSA, 71 percent of the region’s housing stock was built before 1970, which indicates most construction occurred prior to the creation of the National Floodplain Insurance Program (NFIP).

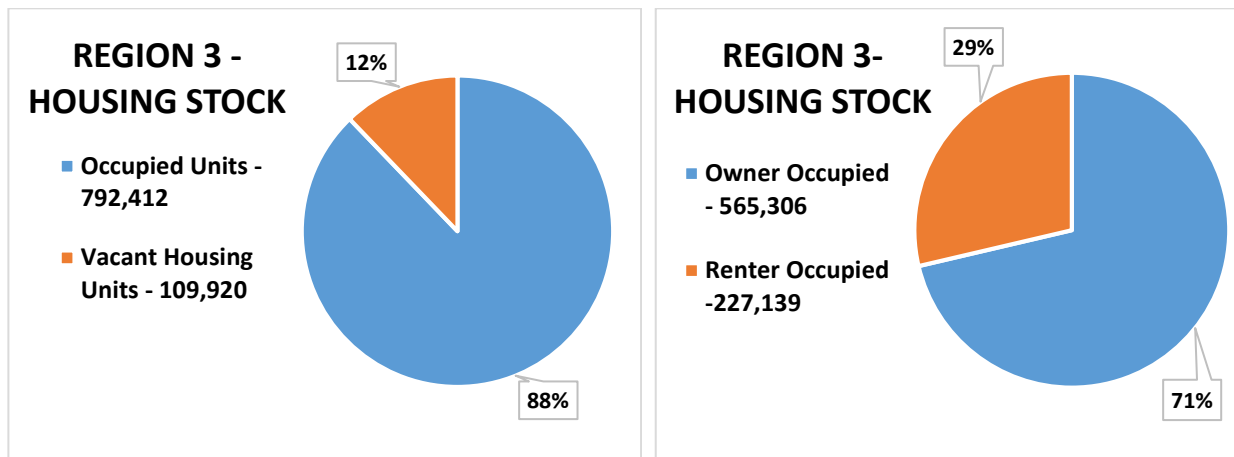


Chart 1.1.ii

TRANSPORTATION

Table 1.1.mm provides a general overview of Region 3 transportation systems, which include interstate highways, U.S. highways, rail lines, airports, and river ports. There is one Class A airport in the Region located in Trumbull County. Nine of thirty-two counties are served by the interstate system, but most counties have at least one U.S. highway. A major rail line serves all counties except Noble and Morgan counties. Seven counties have ports along the Ohio River and one county (Ashtabula) has Lake Erie Ports.

REGION 3 TRANSPORTATION SYSTEMS

Counties	Interstate Highways	U.S. Highways	Rail Lines	Class A Airports	Total Airports	Lake ports/ River ports
Adams		X	1		1	
Ashtabula	X	X	4		2	2
Athens		X	2		1	
Belmont	X	X	2		3	1
Brown		X	1		1	
Carroll			3		2	
Clermont	X	X	2		1	
Columbiana		X	3		2	4
Coshocton		X	1		2	
Gallia		X	2		1	1
Guernsey	X	X	1		2	
Harrison		X	3		1	
Highland		X	1		1	
Hocking		X	3			
Holmes		X	2		1	
Jackson		X	1		1	
Jefferson		X	4		2	1
Lawrence		X	1		1	2
Mahoning	X	X	4		5	
Meigs		X	2			
Monroe			1		1	
Morgan					1	
Muskingum	X	X	4		2	
Noble	X				1	
Perry		X	3		1	
Pike		X	3		1	
Ross		X	4		1	
Scioto		X	2		1	3
Trumbull	X	X	4	1	3	
Tuscarawas	X	X	4		1	
Vinton		X	1		1	
Washington	X	X	1			2

Table 1.1.mm